

REMARKS

The office action and reference cited and applied have been carefully considered together with the present application. Amendments have been made in an effort to place the application in condition for immediate allowance. Accordingly, reconsideration of the rejection of claims 1-58 is respectfully requested.

Claims 1-10, 12, 16-19, 25-30, 32, 33, 36, 40-43, and 49-58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Krohn (U.S. Publ. No. 2004/0236965) and newly cited Balfanz et al. (U.S. Pat. No. 7,392,387). It is believed that these claims are not taught or suggested by these cited references.

Under the analysis required by *Graham v. John Deere*, 383 U.S. 1 (1966) to support a rejection under § 103, the scope and content of the prior art must first be determined, followed by an assessment of the differences between the prior art and the claim at issue in view of the ordinary skill in the art. In the present case, the scope and content of the prior art, as evidenced by Krohn and Balfanz, do not include the subject matter of claims 1-10, 12, 16-19, 25-30, 32, 33, 36, 40-43, and 50-58 as amended. Accordingly, Applicant respectfully requests reconsideration of the rejected claims.

Applicant has amended claim 1 to incorporate the features recited in dependent claim 9, which has now been canceled. The Examiner cited these features as being taught by Krohn. Applicant respectfully disagrees. Krohn is directed to a system where a client device 403 establishes an SSL (Secure Socket Layer) communication link with a server 103 based on the exchange of “hello” messages that include information for establishing the SSL link between the client and the server

(Paragraphs 145 and 147). Krohn also discloses use of a message digest appended to the end of data packets containing a message, which is then extracted by the server to determine from which node the message originated (Paragraphs 155 and 156). Krohn further discloses that this message digest can be formed by a hash algorithm using the message content and a secret key known to both the server and the identity provider.

However, Krohn fails to disclose several features as provided in amended claim 1, which recites, among other things, “a method of secure information distribution between nodes, the method comprising, providing, by a first node, a component value A1; providing, by an adjacent node, a component value B1 as a challenge to the first node; performing...a handshake process...wherein the handshake process comprises requiring each of the first node and the adjacent node to calculate identical values by applying the component values A1 and B1, and a key value associated with the secure group, to a one way function $f(x)$.”

First, the Examiner cites Krohn as teaching use of component values A1 and B1 by referencing “message content” from a first and second node in Krohn. However, Krohn discloses that “client data message is passed to the identity provider” (Paragraph 0155). Therefore, the message content is merely one set of data that is passed from one device to another, it does not represent two distinct values, each associated with a different node. On the other hand, claim 1 recites two different values A1 and B1, provided by a first node and an adjacent node respectively.

Following from the distinction made above, in claim 1, three values are being provided to the one way function $f(x)$, namely, A1, B1, and a key value associated with the group. Krohn discloses use of a hash function that receives two

values as shown in paragraph 158, which states “[t]his message digest can be formed by a cryptographic algorithm, a ‘hash function’ from the message content [first value] and a secret key [second value] known to both the server and identity provider.” As noted above, the message content is one value (not two separate values provided by each node). It is noted that use of three values instead of two in a one way function increases security as it is more difficult to reverse engineer (i.e., determine the three values from the single resulting value after the function is applied). This feature, as recited in claim 1, is not taught or suggested by Krohn.

Further, the hash function in Krohn is used to form a message digest for determining “which identity provider the message originated.” (Paragraph 0156). The one way function (i.e., handshake process) in Applicant disclosure is not used in this way, but rather is used to “determine membership in a secure group” as recited in amended claim 1. As such, this feature, as recited in claim 1, is not taught or suggested by Krohn.

Finally, amended claim 1 recites that both the first node and the adjacent node are required to calculate values through use of the one way function, and that these values must be identical to for the adjacent node to prove membership in the secure group. Krohn on the other hand, only discloses that a single message digest is formed by a hash function (Paragraph 158). Krohn does not disclose two values being determined by separate two applications of a one way function, nor does it disclose determining a node’s membership in a secure group by determining whether those two values are identical. Therefore, this feature, as recited in claim 1, is not taught or suggested by Krohn.

Balfanz also does not disclose these features. Indeed, Balfanz does not disclose any use of a one way or hash function let alone use of such functions to determine a node's membership in a secure group.

Accordingly, since neither Krohn nor Balfanz teach or suggest at least the above-references features as asserted by the Examiner, which are recited in amended claim 1. Claims 25 and 50 have also been amended similarly amended therefore claims 1, 25, 49, and 50 and the corresponding dependant claims should be allowed.

Claims 11, 13, 20, 21, 35, 37, 44-45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Krohn in view of Balfanz, in further view of Benantar (U.S. Pat. No. 6,854,056). As these claims depend from claims that should now be in allowable form, it is respectfully requested that all the above-referenced rejections be withdrawn.

Claims 14, 15, 23, 24, 38, 39, 47, and 48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Krohn in view of Balfanz, as applied to claims 1 and 25, in further view of Hafer (U.S. Pat. No. 4,530,092). As these claims depend from claims that should now be in allowable form, it is respectfully requested that all the above-referenced rejections be withdrawn.

Claims 22 and 46 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Krohn in view of Balfanz, as applied to claims 1 and 25, in further view of Levine (U.S. Publ. No. 2003/0061481). As these claims depend from claims that should now be in allowable form, it is respectfully requested that all the above-referenced rejections be withdrawn.

For the foregoing reasons, the Applicant respectfully submits that all pending claims are in allowable form and requests that all claims be reconsidered and allowed. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, he is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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